

Purchase Order Receipt Listing

Wednesday, April 06, 2016 1:37:27 PM

All amounts are calculated in domestic currency.

All Vendors PO ID PO31884 All Receipt Dates All Line Item Types

All Item ID/GL/WOs All Rec. Employees All Currencies

Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
Vendor ID \ Vendor Name VC-COP001 Thyssenkrupp Materials CA Ltd											
PO31884	1		M303H0.500	f	4/7/2016	4/6/2016	12.0000	\$3.35	0.0000	0	\$40.19
CAD	No		303 HEX BAR .500 m134495	f	12.0000	PLOU01		\$40.19	0.0000	0	
	2		M304R0.375	f	4/7/2016	4/6/2016	24.0000	\$1.52	0.0000	0	\$36.59
	No		304 ROUND BAR 0.375	f	24.0000	PLOU01		\$36.59	0.0000	0	
			m134495								
	3		M304R1.000	f	4/7/2016	4/6/2016	24.0000	\$4.12	0.0000	0	\$98.87
	No		304 round bar 1.00 m134495	f	24.0000	PLOU01		\$98.87	0.0000	0	
			m134495								
	4		M304S20GA	sf	4/7/2016	4/6/2016	64.0000	\$2.82	0.0000	0	\$180.76
	No		304/316 .040 Sheet m134495	sf	64.0000	PLOU01		\$180.76	0.0000	0	
			m134495								
	5		M6061T6B0.500X02.000	f	4/7/2016	4/6/2016	12.0000	\$3.31	0.0000	0	\$39.73
	No		6061-T6 Bar .500 x 2.00 m134495	f	12.0000	PLOU01		\$39.73	0.0000	0	
			m134495								
	6		M6061T6B00750X00.125	f	4/7/2016	4/6/2016	60.0000	\$0.73	0.0000	0	\$43.89
	No		6061-T6 Bar .750 x .125 m134495	f	60.0000	PLOU01		\$43.89	0.0000	0	
			m134495								
	7		M6061T6B2.000X08.000	f	4/7/2016	4/6/2016	8.0000	\$37.02	0.0000	0	\$296.15
	No		6061-T6 BAR 2.00' X 8.00" (CUT IN 4FT SECTION) m134495	f	8.0000	PLOU01		\$296.15	0.0000	0	
			m134495								

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
VendorID\Vendor Name	VC-COP001	Thyssenkrupp Materials CA Ltd									
PO31884	8	71401-45			4/7/2016	4/6/2016	1.0000	\$0.00	0.0000	0	\$0.00
CAD	No	PROCUREMENT QUALITY CLAUSES m134495			1.0000	PLOU01		\$0.00	0.0000	0	
Total Received Quantity:											205.0000
Total Qty to Inspect (PO U/M):											0.0000
Total Reject Quantity:											0.0000
Total Receipt Value:											\$736.18
Total Balance Due Quantity:											0.0000

B I L L O F L A D I N G

No: PEC 984968

Ship From:
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 905-738-9033

Ship Date 04Apr16 at 10:50 From PFW
Probill

Via VIM DELIVERY
FOB CONCORD
Frt PREPAID
Route 0- 0 Manifest
Vhcle Trailer
Slp STAN IVERS (905-532-1350)
Sold To: (20115)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7

Ship To: (1)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7
Tel: 613-632-9577 Fax: 613-632-1053

B I L L O F L A D I N G

1) Our Order PEC-913334- 1 Your PO # 31884
STAINLESS STEEL HEX BAR 303 STAINLESS
.50" HEX X 144.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
427290	518192	12 FT	1	9

2) Our Order PEC-913334- 2 Your PO # 31884
STAINLESS STEEL ROUND BAR 304L
.375" DIA X 144.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
W4K7	518193	24 FT	2	9

3) Our Order PEC-913334- 3 Your PO # 31884
STAINLESS STEEL ROUND BAR 304L
1.00" DIA X 144.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
X7R2	518194	24 FT	2	66

4) Our Order PEC-913334- 4 Your PO # 31884
STAINLESS STEEL SHEET 304-2B
.0360 Nom X 48.0000" X 96.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
AOA004-AAB	517991	64.00 SFT	2	96

5) Our Order PEC-913334- 5 Your PO # 31884
ALUMINUM FLAT BAR 6061-T6511
.50" x 2.00" X 144.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
Z00264145	518195	12 FT	1	14

Page: 1Continued

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

SHIP FROM:
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 905-738-9033

SHIP DATE 04Apr16 at 10:50 From PFW
Probill
Via VIM DELIVERY
FOB CONCORD
Frt PREPAID
Route 0- 0 Manifest
Vhcle Trailer
Slp STAN IVERS (905-532-1350)
Sold To: (20115)
DART AEROSPACE

SHIP TO: (1)
DART AEROSPACE

B I L L O F L A D I N G

6) Our Order PEC-913334- 6 Your PO # 31884

ALUMINUM FLAT BAR 6061-T6511

.125" x .750" X 240.0000"

Heat Number

421726-1

Tag No

518196

Quantity

60 FT

PCS

3

Wt LBS

7

7) Our Order PEC-913334- 7 Your PO # 31884

ALUMINUM FLAT BAR 6061-T6511

2.00" X 8.00" X 48.0000"

Heat Number

Z00052078

Tag No

518232

Quantity

8 FT

PCS

2

Wt LBS

151

TOTAL:

Tags

7

PCS

13

LBS

352

Heat Number

421726-1

427290

AOA004-AAB

W4K7

X7R2

Z00052078

Z00264145

*** Chemical Analysis ***

ADD ON TO 913328

MILL TEST REPORTS, PACKING SLIPS ARE TO BE SENT
WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR
TO SHIPPING.

ATTN: CHANTAL/LINDA

** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **

** REFERENCED ON IT **

Page: 2Continued

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.

MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

REÇU EN BONNE CONDITIONS / RECEIVED IN GOOD CONDITION

DATE

TVQ/GST# 1017327981 TQ001 TPS/GST TVH/HST # 140223934 RT0001

B I L L O F L A D I N G
Ship From:
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 905-738-9033

No: PEC 984968
Ship Date 04Apr16 at 10:50 From PFW
Probill
Via VIM DELIVERY
FOB CONCORD
Frt PREPAID
Route 0- 0 Manifest
Vhcle Trailer
Slp STAN IVERS (905-532-1350)
Sold To: (20115)
DART AEROSPACE

Ship To: (1)
DART AEROSPACE

=====

B I L L O F L A D I N G

TOTAL 2 BDLS 2 SKIDS GW 473 LBS

*CUSTOMER PICK-UP HRS AT THYSSENKRUPP MATERIALS NA
CONCORD, ONT.* *** 9:00 AM TO 4:00 PM ***

**** TEL. 800-926-2600 ****

* WE STOCK STAINLESS STEEL *

* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT *

***PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE
ADDED TO EVERY ORDER.***

Page: 3 Last

ALUMINIUM • LANTON • CUIVRE • P. ANTIQUE • ACIER INOX
ALUMINIUM • BRASS • COPPER • PLASTICS • STAINLESS

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

REÇU EN BONNE CONDITIONS / RECEIVED IN GOOD CONDITION

DATE

TVQ/QST# 1017327981 TQ001 TPS/GST TVH/HST # 140223934 RT0001

Acciaierie Valbruna S.p.A.



**CERTIFICATO DI COLLAUDO
ABNAHMEPRUEFZEUGNIS
INSPECTION CERTIFICATE
CERTIFICAT DE RECEPTION
EN 10204 (2004), 3.1**

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4
Telephone number : 0039 (0) 444968211

Clienti / Besteller/Purchaser/Client
VALBRUNA CANADA LTD
8724 HOLGATE CRESCENT
L5T 5Z1-MILTON, ONT L5T 5Z1-GA

Produttore: ACCIAIERIE VALBRUNA S.P.A.
Hersteller/Hersteller/producer

QUALITY MANAGEMENT SYSTEM CERTIFIED BY LLOYD'S REGISTER

Avviso di Spedizione: D-VI15014804
Lienance/Packing list/BL

Certificato nr: MEST695568/2015/
Prüfung/Testing/Exam

Conferma ordine nr: EH4013171
Works/Our Order/Ref. nr.

Marchio di Fabbrica:
Zeichen des Lieferanten
Trade mark
Sigle de l'usine: producer



Stato di fornitura: Hot rolled - Annealed Cold Drawn
Lieferzustand/Delivery state/Etat de livraison

Tipo di Elaborazione: E+AOD
Erzeugnisart/Working process/Mode of production

Punzone del Collaudatore:
Stempel des Messsachverständigen
Inspector's stamp/Plaqueon de l'inspecteur

Specifiche:
Anforderungen / Requirements / Exigences

VSI 0 303 HS A,CF
AMS 5640 U TYPE 1 A
ASTM A320 2011A B8F (1)
MIL-S-862 B/1 303

AISI 303
ASME SA320 2013 B8F (0)
ASTM A370 2014
QQ-S-764 B/2 303 A

AMS 5640 U S30300 A
ASTM A314 2008 S30300
ASTM A582 2012 S30300 A

(0) SECTION II PT A 2013 EDITION
(1) Chemical analysis only.

(0) Chemical analysis only.

DAS

16

9-89

16/04/07

Qualità: 303HS
Verfahren/Grade/Qualité

Marca: MV188ZHS
Markenbezeichnung/Brand Name

Tolleranza: ASTM A484-14a TABLE 8
Toleranz/Tolerance/Tolérance

Punzonatura: 303HS
Kennzeichnung/Marking/Marquage

Pos. nr. Pos. nr. Item nr. Nr. de poste	Oggetto Gegenstand Product description Description du produit	Dimensioni - In Abmessungen Dimension Dimension	Lunghezza - In Länge Length Longueur	Colata Schmelze Cast Coulée	Pezzi Stückzahl Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Losnr. Lot nr. Lot nr.
0010	Hexagon	0,5000	144 / 150	427290		2.011	430107350

TEST ALLO STATO DI FORNITURA Test on delivery condition - Prüfung auf lieferbarem Produkt - test à l'état de livraison - Prueba sobre el material así como entregado									
TEST	Prova/Probe Bewertung/Ergebnis Lap. (mm) / Diam. (mm) / Läng. (mm) / Quers. (mm)	Temperatura °F	Snervamento Streckgrenze Rp 0,2% k.s.i.	Snervamento Streckgrenze Yield Stress Limit (ksi)	Resistenza Zugfestigkeit Tensile strength Profilmas & Neuron Rm k.s.i.	Allungamento Bruchdehnung Elongation Alongement	Strizione Einknickung Reduction of area Striction	Resilienza Hartschlagarbeit Impact Value Resilience	Durezza Härte Hardness Dureté
	Valori richiesti / Anforderungen/Requis Valeurs requises	min max							140 255
A	12,5	68	L	85	112	40	49		254

TEST	min	max
A Grain size for ASTM E112		5

Mechanical properties according to ASTM A370.

1) Lunghezza allung. 2) Viresale qu. 3) Tangenziale tangenzial

Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata - Iniz. Schmelze/Coarse	min 0,030 max 0,050	0,20 1,00	1,50 2,00	17,00 19,00	- 0,60	- 1,00	8,00 10,00	- 0,100	0,32 -	- 0,4000	- -	- -	- -	- -	- -
	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	Zr %				
427290	0,034	0,34	1,76	17,27	0,47	0,62	8,06	0,094	0,031	0,34	0,0042				

Produced without class I-II Ozone depleting substances.

Solution heat treated free from continuous carbide network.

Micro and macro etch test: OK

Reduction ratio = 176,7 : 1

Annealing temperature: 1940°F for 1 h/water.

Material is DFARS Compliant

Sono state soddisfatte tutte le condizioni richieste
Die gegebenen Anforderungen sind erfüllt
The material has been furnished in accordance with the requirements
Le matériel a été fourni conforme aux exigences

Controllo antimiscelanza: OK
Vermischungsprüfung: befriedigend
Antimixing testing: satisfactory
Contrôle antimélange: satisfaisant

Controllo visivo e dimensionale: soddisfa le esigenze
Beschreibung und Ausmessung: ohne Beanstandung
Visual inspection and dimensional check: satisfactory
Contrôle visuel et dimensionnel: satisfaisant

Melted and manufactured in Italy No welding or weld repair Material free from Mercury contamination

We declare that the finished product is checked for radioactive contamination through Portal System when it leaves the production plant.

Vicenza, 25/05/15 V00308 (Mod. MCE2)	Il collaudatore di stabilimento / der Werkssachverständiger / Works inspector / L'agent d'usine M. Rizzotto	Pagina - 1 di 2
--	--	-----------------

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

STAINLESS STEEL HEX BAR 303 STAINLESS

.50" HEX X 144.0000"

PART NO.

PO/Rel 31884

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-984968-001

4Apr16

Signed by: 

Pg 2/2

**Acciaierie
Valbruna S.p.A.**



**CERTIFICATO DI COLLAUDO
ABNAHMEPRUEFZEUGNIS
INSPECTION CERTIFICATE
CERTIFICAT DE RECEPTION
EN 10204 (2004) , 3.1**

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4
Telephone number : 0039 (0) 444968211

Clienti / Besteller/Purchaser/Client
VALBRUNA CANADA LTD
8724 HOLGATE CRESCENT
L5T 5Z1-MILTON, ONT L5T 5Z1-CA

Produttore: **ACCIAIERIE VALBRUNA S.P.A.**
Hersteller/Item/Usine producteur

Stato di fornitura: Hot rolled - Annealed Cold Drawn
Lieferzustand/Supply state: État de livraison

QUALITY MANAGEMENT SYSTEM CERTIFIED BY LLOYD'S REGISTER

Avviso di Spedizione: D-VI15014804
Lieferanweisung/Faching bei B.L.

Ordine nr: 412005083 Stock - Canada
Remise/Your order/Commande

Tipo di Elaborazione: E+AOD
Erneuerungsart/Writing process/Mode d'elaboration

Certificato nr: MEST695568/2015/
Prüfung/Test/Essai

Conferma ordine nr: EI14013171
Werkz/Our Order/Ref nr

Marchio di Fabbrica:
Zeichen des Lieferanten
Trade mark
Sigle de l'usine producteur

Punzone del Collaudatore:
Stempel des Werkstoffschwerfängers
Inspector's stamp/Pointeur de l'acier/aut



The Quality Management System is Certified acc. Pressure Equipment Directive [97/23/EC] Annex 1, s. 4.3 by TUEV and LLOYD'S

Any act of tampering, modification, alteration, counterfeiting and/or falsification and/or any other action which modifies the contents of this test certificate shall constitute a violation of applicable civil and criminal laws. Acciaierie Valbruna shall protect its rights and interests before any competent court, authority and jurisdiction.

Maximal and/or Valplus grades/products are manufactured with ladle techniques to control composition, distribution, size and shape of non-metallic inclusions for improved machinability.

The supplied product conforms to requirements expressly requested by the purchaser and conforms to requirements specified by certified norms and standards. Should the product be used for more severe, critical and/or in any case different applications than those the material is generally intended for, any different and/or supplementary requirements shall be specifically demanded, at least, upon order of the Product by the Purchaser. Acciaierie Valbruna SpA shall not be responsible for any improper use of the Products.

Vicenza, 25/05/15

VCO008
(MAQ: MCE2)

Il collaudatore di stabilimento / der Werkstoffverständiger / Works inspector / L'agent d'usine

M. Rizzotto 

Pagina - 2 di 2

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M303 H 0.500
 DATE: 20/6/04/07

PO / BATCH NO.: P031884 /
M134495

MATERIAL CERT REC'D: YES
 QUANTITY RECEIVED: 12'
 QUANTITY INSPECTED: 12'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.500"
 THICKNESS RECEIVED: 0.499"
 SHEET SIZE ORDERED: n/a
 SHEET SIZE RECEIVED: n/a

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="radio"/>	
CORRECT FINISH	<input checked="" type="radio"/>	N	
CORROSION	Y	<input checked="" type="radio"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/>	N	
CORRECT MATERIAL	<input checked="" type="radio"/>	N	M303
CORRECT THICKNESS	<input checked="" type="radio"/>	N	0.499"
PHOTO REQUIRED	Y	<input checked="" type="radio"/>	
CORRECT MATERIAL	<input checked="" type="radio"/>	N	ASTM A582
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/>	N	427290
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/>	N	M303 H 0.500
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/>	N	M134495
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	n/a
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS</u> <u>18</u>	SIGNED OFF BY: _____		
DATE: <u>9-89</u> <u>16/04/07</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

THYSSENKRUPP MATERIALS NA

DART AEROSPACE
STAINLESS STEEL ROUND BAR 304L
375" DIA X 144,000"
PART NO.

PO/Rel 31884

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-984968-002

4Apr16
Pg 1/1



740 Imperial Road North

METALLURGICAL TEST REPORT

North American Stainless Canada Inc.
740 Imperial Road North
Guelph, ON N1K1Z3
Canada

Certificate: 97117 1

Mail To:

THYSSENKRUPP MATERIALS

THYSSENKRUPP MATERIALS

Customer: 007206 001

2821 LANGSTAFF ROAD

CONCORD, ON L4K5C6

Date: 9/22/2015 Page: 1

Steel: 304/304L

Finish: CD

Your Order: PEC269176

NAS Order: PN 0056222 03

Corrosion: ASTM A262-10 Prac A/E OK

PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw
UNS 30400/30403 EN 10204 3.1, ASTM A484/13a
ASTM A276/13, ASTM A479/13a, ASTM A182/13 CHEM ONLY,
ASME SA479/13, ASME SA182/10 CHEM ONLY
AMS 5635H, AMS 5647J, AMS QQS-763C, QQS-763F, ASTM F899/11
SOLUTION ANNEAL TEMP 1900F MIN, ASTM A320/08 CL 1 GR B8
ASTM A193/10A-ASME SA193/10 CL 1 GR B8

REMARKS:

COMPLIES W/REQUIREMENTS OF DEAR 252.225-7009 EU DIRECTIVE
2011/65/EU, ROHS. EAF+ADD+CC. NO WELD REPAIR, MELTED AND MFG
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Skid #	Diameter	Size	Weight	Length	Mark	Pieces	Commodity Code
BH4518 2		.3750		1.030	144.00	10	1	

CHEMICAL ANALYSIS

CM(Country of Mill)

ES(Spain)

US(United States)

Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323

HEAT

CM

C %

CO %

CR %

CU %

MN %

MO %

N %

NI %

P %

US

.0148

.1670

18.0890

.4585

1.3750

.3665

.0730

8.5050

.0320

S %

SI %

.0245

.2510

MECHANICAL PROPERTIES

Product Id	1 d o l c x	HB No.	.2YS KSI	UTS KSI	RA %	Elong % 2"
BH4518 2	R L	235.0	85.42	103.54	74.39	44.50

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr.

18880003

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M 304 R 0.375

PO / BATCH NO.: PO 31884 / M 134495

DATE: 16/04/07

MATERIAL CERT REC'D: yes

THICKNESS ORDERED: 0.375

QUANTITY RECEIVED: 24 feet

THICKNESS RECEIVED: 0.374

QUANTITY INSPECTED: 24 feet

SHEET SIZE ORDERED: N/A

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	
CORROSION	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	
CORRECT MATERIAL	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	304
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	.374
PHOTO REQUIRED	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT MATERIAL	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	ASTM A276
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	W4K7
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	M 304 R 0.375
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	M 134495
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	N/A

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
<p>INSPECTED BY: <u>DAS 16 280</u></p> <p>DATE: <u>16/04/07</u></p>	<p>SIGNED OFF BY: _____</p> <p>DATE: _____</p>

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

THYSSENKRUPP MATERIALS NA

DART AEROSPACE
STAINLESS STEEL ROUND BAR 304L
1.00" DIA X 144.0000"
PART NO.

P.O./Ref 31884

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Signed by: 4

BL PEC-984968-003

4Apr16
Pg 1/1

Certificate of Mill Test Results



METALLURGICAL TEST REPORT

North American Stainless Canada Inc.
740 Imperial Road North
Guelph, ON N1K1Z3
Canada

740 Imperial Road North

Certificate: 137381 13

Customer: 007206 001
THYSSENKRUPP MATERIALS
2821 LANGSTAFF ROAD
CONCORD, ON L4R5C6

SHIP TO:
THYSSENKRUPP MATERIALS
2821 LANGSTAFF ROAD
CONCORD, ON L4R5C6

Date: 1/29/2016 Page: 1

Steel: 304/304L

Finish: CD

Corrosion: ASTM A262-10 Pract A/E OK
Red Ratio: 69.4 : 1

Your Order: PEC272114

NAS Order: PN 0061232 01

PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw
UNS 30400/30403 EN 10204 3.1, ASTM A484/13a
ASTM A276/13, ASTM A479/13a, ASTM A182/13 CHEM ONLY,
ASTM A479/13, ASME SA182/10 CHEM ONLY
AMS 5639H, AMS 5647J, AMS QQS-763C, QQS-763F, ASTM F899/11
SOLUTION ANNEAL TEMP 1900F MIN, ASTM A320/08 CL 1 GR B8
ASTM A193/10A-ASME SA193/10 CL 1 GR B8

REMARKS:

COMPLIES W/REQUIREMENTS OF DPM 252.225-7009 EU DIRECTIVE
2011/65/EU, ROHS, EAF+AD+CC. NO WELD REPAIR, MELTED AND MPG
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	SKID #	Diameter	Size	Weight	-----Length-----	Mark	Places	Commodity Code
BH7144 8		1.0000		1.366	144.00	14	1	

CHEMICAL ANALYSIS

CM(Country of Melt)

ES(Spain)

US(United States)

ZA(South Africa)

JP(Japan)

Lab Accreditation Bureau, ISO/IEC 17025, Certificate# 12323

Chemical Analysis per ASTM A751/08

HEAT	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
X7R2	DS	.0248	.1725	18.0785	.4030	1.3305	.3035	.0779	8.5295	.0320

S %	SI %
.0260	.2995

MECHANICAL PROPERTIES

Product Id	1 d o i x	HB No.	.2YS KSI	UTB KSI	RA %	Elong % 4D
BH7144 8	R L	220.0	79.35	103.98	68.89	42.93

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy
of the test methods used, the material meets the specifications stated. These results relate only to the items
tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr.

KRIG LAB

1/29/2016

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304R1.000

PO / BATCH NO.: _____

DATE: 16/04/07

MATERIAL CERT REC'D: yes

THICKNESS ORDERED: 1.000

QUANTITY RECEIVED: 24'

THICKNESS RECEIVED: .999

QUANTITY INSPECTED: 24'

SHEET SIZE ORDERED: N/A

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	(N)	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL	(Y)	N	304
CORRECT THICKNESS	(Y)	N	.999
PHOTO REQUIRED	Y	(N)	
CORRECT MATERIAL	(Y)	N	ASTM A276
CORRECT REF # TO LINK CERT	(Y)	N	
CORRECT MATERIAL IDENTIFICATION	(Y)	N	M304R1.000
CORRECT M# ON THE MATERIAL	(Y)	N	M134495
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	(N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	N/A
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS 16</u> DATE: <u>9-89 16/04/07</u>	SIGNED OFF BY: _____ DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

STAINLESS STEEL SHEET 304.2B
0360 Nom X 48.0000" X 96.0000"
PART NO.

P.O./Ref 31884

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-984968-004

4 Apr 16
Pg 1/1



遠生鋼鐵股份有限公司
YUEN CHANG STAINLESS STEEL CO., LTD.

檢驗證明書

MILL TEST CERTIFICATE(S)

列印日期 ISSUE DATE: 2015/03/24

遠生市道本區中正路235號13F
13F, No. 235 Jungfeng 4th Road, Chianjin
Chi, Kaohsiung, Taiwan
TEL: 886-7-9658558 FAX: 886-7-9685768
http://www.yuenchang.com.tw

客戶名稱 Thyssenkrupp Steel Services
A Division Of Thyssenkrupp Materials Na Inc 22355 West Eleven Mile Road Southfield MI 48033 USA

商品描述 Desc Of Goods
Description Of Goods And/or Services:
Prime, Cold Rolled Stainless Steel Sheets, Silled Edge, As Per ASTM A240/A480.

項目 Item	鋼捲編號 Coil No.	爐號 Heat Number(s)	鋼種 Steel Grade	表面 Finish	厚度尺寸 Thickness x Width x Length	淨重 Net Weight (KGS)
AF009	CAAL0268-14	DIN010-ADG	304	2B	26GA x 48 x 96	1,727
AF010	CCWR0003-18	AOA004-AAB	304	2B	20GA x 48 x 96	1,102
AF011	CCWR0003-19	AOA004-AAB	304	2B	20GA x 48 x 96	1,104
AF003	CATF0016-20	BOA005-AFD	304	2B	16GA x 48 x 96	1,736
AF001	CATF0016-18	BOA005-AFD	304	2B	16GA x 48 x 120	1,086
AF002	CATF0016-19	BOA005-AFD	304	2B	16GA x 48 x 120	1,087
AF008	CCYL0003-54	AOA002-AAD	304	2B	14GA x 48 x 144	901
AF006	CARS0019-13	BOB006-ABD	304	2B	12GA x 48 x 96	1,073

Item	C	Si	Mn	P	S	Cr	Ni	N	Cu	Mo	Others	T.S N/mm2	Y.S(0.2%) N/mm2	Elong (%)	HB	HRB	HV
AF009	0.045	0.480	1.158	0.037	0.0022	18.055	8.010	0.042	0.043			765	300	58.0			83.5
AF010	0.023	0.300	1.380	0.029	0.0112	18.250	8.040	0.071	0.310	0.110		651	294	57.0			160.0
AF011	0.023	0.300	1.380	0.029	0.0112	18.250	8.040	0.071	0.310	0.110		651	294	57.0			160.0
AF003	0.050	0.430	1.110	0.039	0.0010	18.300	8.100	0.040	0.056	0.098		686	281	56.0			83.0
AF001	0.050	0.430	1.110	0.039	0.0010	18.300	8.100	0.040	0.056	0.098		686	281	56.0			83.0
AF002	0.050	0.430	1.110	0.039	0.0010	18.300	8.100	0.040	0.056	0.098		686	281	56.0			83.0
AF008	0.042	0.510	0.980	0.033	0.0020	18.190	8.040	0.058				644	280	54.9			83.5
AF006	0.040	0.440	1.070	0.030	0.0020	18.200	8.000	0.040	0.188	0.040		650	272	56.0			83.5

化學成分 Chemical Analysis (%)

機械性質 Mechanical Properties

QC Manager

茲證明本廠所製產品，均係材料規格製造及控制，並符合規格之要求。
We hereby certify that the products described herein have been manufactured and tested with satisfactory results in accordance with the requirement of the above material specification.
本廠所製產品，均係材料規格製造及控制，並符合規格之要求。
We hereby certify that the products described herein have been manufactured and tested with satisfactory results in accordance with the requirement of the above material specification.
本廠所製產品，均係材料規格製造及控制，並符合規格之要求。
We hereby certifying the Material To ASTM A240/A480 As Per EN 10204/3.1

YUEN CHANG STAINLESS STEEL CO., LTD.

David Wang

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304S2067A

PO / BATCH NO.: 2031884 / M134495

DATE: 2016/04/08

MATERIAL CERT REC'D: YES

THICKNESS ORDERED: 0.040

QUANTITY RECEIVED: 64'

THICKNESS RECEIVED: 0.032

QUANTITY INSPECTED: 64'

SHEET SIZE ORDERED: 4x8 22

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: 4x8 22

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/> N	
CORROSION	Y <input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> N	
CORRECT MATERIAL	<input checked="" type="checkbox"/> N	304
CORRECT THICKNESS	<input checked="" type="checkbox"/> N	0.032
PHOTO REQUIRED	Y <input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/> N	ASTM A240
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> N	ADA004-1AAB
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> N	M304S2067A (0040)
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> N	M134495
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.
RECORD RESULTS BELOW

	HRC	HRB	DUR A	DUR D	
TYPE OF MATERIAL					n/A
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS 16</u> DATE: <u>16/04/08</u>	SIGNED OFF BY: _____ DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511
50" x 2.00" X 144.0000"
PART NO.

PO/Rel 31884

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-984968-005

4Apr16

Signed by: *[Signature]*

Pg 1/2

KAISER
ALUMINUM
FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

CUSTOMER PO NUMBER PEC-273675-1		CUSTOMER PART NUMBER: B21/STK		PRODUCT DESCRIPTION 500 X 2.000 SC RECT BAR	
KAISER ORDER NUMBER 6004148	LINE ITEM 001	SHIP DATE: 03/15/2016	KAISER LOT NUMBER: Z00264145	ALLOY: 6061	TEMPER: T6511
WEIGHT SHIPPED: 1016.000 LB	QUANTITY: 72.000 PCS	B/L NUMBER: 615069	DIAM/DAF/THKNS:	WIDTH:	LENGTH: 12.000 FT
SHIP TO: THYSSENKRUPP CANADA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			SOLD TO: THYSSENKRUPP CANADA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
Z00264145	0001	1	44.2	38.5	20.5	RE 93	N/A	N/A
Z00264145	0001	2	44.1	38.5	20.4	RE 92	N/A	N/A
Z00264145	0001	3	44.2	38.6	19.2	RE 93	N/A	N/A
Z00264145	0001	4	44.0	38.1	19.6	RE 93	N/A	N/A
Z00264145	0001	5	46.2	41.1	19.7	RE 95	N/A	N/A
Z00264145	0001	6	46.3	40.9	20.1	RE 95	N/A	N/A
Z00264145	0001	7	45.9	39.9	19.9	RE 94	N/A	N/A
Z00264145	0001	8	43.7	38.0	14.3	RE 94	N/A	N/A
Z00264145	0001	9	45.6	39.9	18.8	RE 95	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.60	0.15	0.00	0.90	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
105939	.61	.24	.21	.07	.85	.06	.03	.02	.00	.00	.00	.01	.03

Applicable Requirements:

ASTM-B221-14 STENCILED ASME-SB221 2009 SECT 11 AMS-QQ-A-200/8A UNS#A96061 (T6511 also conforms to T6-not applicable to other tempers)

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA

MERCURY IS NOT A NORMAL BACKGROUND ELEMENT IN ALUMINUM ALLOYS. NEITHER MERCURY NOR ANY OF ITS COMPOUNDS ARE UTILIZED BY KAISER ALUMINUM IN THE MANUFACTURE OF THIS MATERIAL.

DAS

16

9-89

166408

Plant Serial: 00221763

Kaiser Order Number: 6004148

Line Item: 001

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

.50" x 2.00" X 144.0000"

PART NO.

PO/Rel 31884

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-984968-005

4Apr16

Signed by: 

Pg 2/2

KAISER
ALUMINUM
FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Aimee L. Macnowski, Quality & Technology Manager

Aimee L. Macnowski

Plant Serial: 00221763

Kaiser Order Number: 60C4148

Line Item: 001

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6 B.O. 500 x 2.00"

PO / BATCH NO.: 7031884

DATE: 2006/01/08

M134495

MATERIAL CERT REC'D: YES

THICKNESS ORDERED: 2.00 x 0.10

QUANTITY RECEIVED: 12'

THICKNESS RECEIVED: 0.5204

QUANTITY INSPECTED: 12'

SHEET SIZE ORDERED: N/A

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/> N	
CORROSION	Y <input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> N	
CORRECT MATERIAL	<input checked="" type="checkbox"/> N	<u>6061T6</u>
CORRECT THICKNESS	<input checked="" type="checkbox"/> N	<u>0.5204</u>
PHOTO REQUIRED	Y <input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/> N	<u>Ans - QQ-A-200/8</u>
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> N	<u>200264145</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> N	<u>M6061T6 B.O. 500 x 2.00</u>
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> N	<u>M134495</u>
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.
RECORD RESULTS BELOW

TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	
					<u>N/A</u>

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS</u>	SIGNED OFF BY: _____		
DATE: <u>3-89</u>			
DATE: <u>10/01/03</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

125" x .750" X 210.0000"

PART NO.

PO/Rel 31884

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-984968-006

4Apr16

Signed by: 

Pg 1/1

CAN ART

ALUMINUM EXTRUSION INC.

Material Test Report

Manifest: 305203

Ship To: ThyssenKrupp Materials NA
2821 Langstaff Road
Concord, ON L4K 5C6

Ticket:
5463289

Our Order: 421726 - 1

Cust P.O.: 272890

Die: ES05485

Part: 05485-000-240

Alloy Temper: 6061 T6511

Description: .125 x .750

Print Date: 2/29/16

Chemical Composition Range

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	OtherEach	OtherTotal
6061										
Min	0.40		0.15		0.8	0.04				
Max	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15	0.05	0.15

Mechanical Properties

Strength ksi

Sample ID	Cast #	Lot #	Test Date	Ultimate Tensile	Yield 2% offset	Elongation 2" gage length
421128	3B1855	A11	2/26/16	46.20	42.72	8.2

Applicable Specifications: ASTM B221-14 AMS-QQ-A200/8

DAS

16

3-89

Country of Origin: 85 Parkshore Drive, Brampton, Ontario CANADA L6T 5M1

16604108

Can Art Aluminum Extrusion Inc. certifies that materials shipped under this order have been inspected and tested in accordance with Aluminum Association and agreed upon customer specifications. Can Art assumes no liability for additional costs which may be incurred during the customer's manufacture and sale of its products, and is subject only to the replacement of any materials not within agreed upon specifications provided written notification is received by Can Art within 30 days from the date of shipment.

Siddharth Desai - Tensile Testing

Authorized:


Evan Eng, Quality Assurance Manager

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M606T6B0.0750 x .125"

DATE: 2016/04/08

PO / BATCH NO.: PO 31884 /
M134495

MATERIAL CERT REC'D: YES
QUANTITY RECEIVED: 60'
QUANTITY INSPECTED: 60'
QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.125
THICKNESS RECEIVED: 0.125
SHEET SIZE ORDERED: n/a
SHEET SIZE RECEIVED: n/a

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/> N	
CORROSION	Y <input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> N	
CORRECT MATERIAL	<input checked="" type="checkbox"/> N	<u>6061T6</u>
CORRECT THICKNESS	<input checked="" type="checkbox"/> N	<u>0.125</u>
PHOTO REQUIRED	Y <input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/> N	<u>AMS-QQ-A201P</u>
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> N	<u>421726-1</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> N	<u>M606T6 00750 x .125</u>
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> N	<u>M134495</u>
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	<u>n/a</u>

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>16</u> DATE: <u>16/04/08</u>	SIGNED OFF BY: _____ DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511
2.00" X 8.00" X 48.0000"
PART NO.

PO/Rel 31884

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-984968-007

4Apr16

Signed by: *[Signature]*

Pg 1/1

KAISER
ALUMINUM
FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

CUSTOMER PO NUMBER: PEC-273235-11		CUSTOMER PART NUMBER: W22/STK		PRODUCT DESCRIPTION: 2.000 X 8.000 PRECISION WIDE BAR	
KAISER ORDER NUMBER: 6002890	LINE ITEM: 011	SHIP DATE: 02/18/2016	KAISER LOT NUMBER: Z00052078	ALLOY: 6061	TEMPER: T6511B
WEIGHT SHIPPED: 903.000 LB	QUANT. TY: 4 000 PCS	B/L NUMBER: 614809	DIAM/DAF/THKNS: 2.000	WIDTH: 8.000	LENGTH: 12.000 FT
SHIP TO: THYSSENKRUPP CANADA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			SOLD TO: THYSSENKRUPP CANADA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
Z0C052078	0001	0001	52.0	47.9	15.8	RE 93	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
105877	.75	.30	.27	.08	.91	.10	.04	.02	.00	.00	.00	.01	.04

Applicable Requirements:

PER ASME-B221-14, SPECIFIED ASME-SB221 2009 SECT II PER AMS-QQ-A-200/8A UNS# A96061
MEETS ALL SPECIFICATION REQUIREMENTS FOR 6061-T6511/T6 ELEVATED MINIMUM MECHANICAL
PROPERTIES AS FOLLOWS: UTS = 42.0 KSI MIN YIELD = 38.0 KSI MIN ELONGATION = 10.0% MIN

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA
MERCURY IS NOT A NORMAL BACKGROUND ELEMENT IN ALUMINUM ALLOYS. NEITHER MERCURY NOR ANY
OF ITS COMPOUNDS ARE UTILIZED BY KAISER ALUMINUM IN THE MANUFACTURE OF THIS MATERIAL.

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been
inspected and tested and found in conformance with applicable specifications forming a part of the
description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on
Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Aimee L. Macnowski, Quality & Technology Manager

Aimee L. Macnowski

Plant Serial: 00217450

Kaiser Order Number: 6002890

Line Item: 011

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: 6061T6 B 2.00 x 8.00

PO / BATCH NO.: P03884 /
M134495

DATE: 2016/24/08

MATERIAL CERT REC'D: YES
QUANTITY RECEIVED: 8'
QUANTITY INSPECTED: 5'
QUANTITY REJECTED: 0

THICKNESS ORDERED: 2.00"
THICKNESS RECEIVED: 2.006
SHEET SIZE ORDERED: w/p
SHEET SIZE RECEIVED: w/p

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	N	
CORROSION	Y	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	N	
CORRECT MATERIAL	<input checked="" type="checkbox"/>	N	6061T6
CORRECT THICKNESS	<input checked="" type="checkbox"/>	N	2.006
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/>	N	AMS-QQ-A-200 / 8
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	N	Z0052018
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	N	6061T6 B 2.00 x 8.00
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	N	M134495
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK.
RECORD RESULTS BELOW

TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	w/p

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS</u> DATE: <u>2-89 10/04/08</u>	SIGNED OFF BY: _____ DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO31884**

Purchase Order Date 3/31/2016

PO Print Date 4/4/2016

Page Number 1 of 4

Order From : VC-COP001
THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	905 669 9444	Customer POID	
		Customer Tax #	10127-2607
Ship To Contact		Terms	Net 30
Ship To Phone		Currency	CAD
Ship Via:	VENDOR'S TRUCK	FOB	FCA - (Free Carrier)
Ship Acct:			

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	M303H0.500	303 HEX BAR .500	4/7/2016 Yes 4/7/2016		12.00 ✓ f	\$4.35	\$52.20
	MATERIAL: AISI 303 SS HEX BAR AS PER ASTM A582						
	NOTE: AISI 304/316 NOT ACCEPTABLE						
Line Total:							\$52.20
2	M304R0.375	304 ROUND BAR 0.375	4/7/2016 Yes 4/7/2016		24.00 ✓ f	\$1.98	\$47.52
	MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276						
	(NOTE: AISI 303 NOT ACCEPTABLE)						
Line Total:							\$47.52

5016-04-16

Note:

4/4/2016



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO31884**

Purchase Order Date 3/31/2016

PO Print Date 4/4/2016

Page Number 2 of 4

Order From : VC-COP001
THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 905 669 9444

Ship To Contact

Ship To Phone

Ship Via: VENDOR'S TRUCK

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms Net 30

Currency CAD

FOB FCA - (Free Carrier)

3	M304R1.000	304 round bar 1.00	4/7/2016	24.00	✓	\$5.35	\$128.40
			Yes	f			
			4/7/2016				

MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276

(NOTE: AISI 303 NOT ACCEPTABLE)

Line Total: \$128.40

4	M304S20GA	304/316 .040 Sheet	4/7/2016	64.00	✓	\$3.67	\$234.75
			Yes	sf			
			4/7/2016				

MATERIAL: AISI 304/316 SS SHEET ANNEALED
AS PER MIL-S-5059 OR AMS 5513 (304)
OR AMS 5524 (316) OR ASTM A240 OR
ASME SA240

Line Total: \$234.75

5	M6061T6B0.500X02.000	6061-T6 Bar .500 x 2.00	4/7/2016	12.00	✓	\$4.30	\$51.60
			Yes	f			
			4/7/2016				

MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR
ASTM B221

2016-04-16

Note:

4/4/2016



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO31884**

Purchase Order Date 3/31/2016

PO Print Date 4/4/2016

Page Number 3 of 4

Order From : VC-COP001
THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone 905 669 9444

Ship To Contact
Ship To Phone
Ship Via: VENDOR'S TRUCK
Ship Acct:

Buyer Chantal Lavoie
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency CAD
FOB FCA - (Free Carrier)

Line Total: \$51.60

6 M6061T6B00750X00.125 ✓ 6061-T6 Bar .750 x .125 ✓ 4/7/2016
Yes
4/7/2016

60.00 ✓ \$0.95 \$57.00
f

MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR
ASTM B221

Line Total: \$57.00

7 M6061T6B2.000X08.000 ✓ 6061-T6 BAR 2.00' X 8.00" (CUT IN 4FT SECTION) ✓ 4/7/2016
No
4/7/2016

8.00 ✓ \$48.08 \$384.61
f

MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR
ASTM B221

PLEASE CUT IN SECTION 4 FT

Line Total: \$384.61

Note:

4/4/2016



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO31884**

Purchase Order Date 3/31/2016

PO Print Date 4/4/2016

Page Number 4 of 4

Order From : VC-COP001
THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 905 669 9444

Ship To Contact

Ship To Phone

Ship Via: VENDOR'S TRUCK

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms Net 30

Currency CAD

FOB FCA - (Free Carrier)

8	71401-45	PROCUREMENT QUALITY CLAUSES	4/7/2016	1.00	✓	\$0.00	\$0.00
---	----------	--------------------------------	----------	------	---	--------	--------

No

Procurement Quality Clauses

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable)

A026 certification of materila conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

4/7/2016

Spoke-out-16

Line Total: \$0.00

PO Total: \$956.08

CL

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 4

Change Date: 4/4/2016